

Dam Repair or Reconstruction Application Instructions

The Wisconsin Department of Natural Resources helps protect your rights in public waters as well as public safety, by ensuring adequate planning and design of projects affecting fish and wildlife habitat, water quality and natural scenic beauty. This is done through permit and plan approval requirements for individual water projects. Chapters 30 and 31 of the Wisconsin Statutes require written permits for certain activities on or near a watercourse.

Plan approval is required for dam repairs or reconstructions on navigable and non-navigable watercourses. Contact your local Water Management Engineer (WME) to determine whether a formal approval is required for your maintenance activity or minor repair.

Prior to applying for this permit:

- For more information, select “Repair or reconstruction” from the Dams section on the website, dnr.wi.gov/permits/water/.
- Contact your county, city, or village zoning department to find out if your project site is either in a mapped wetland or floodplain and if local zoning restrictions could affect your project.

To apply:

- Apply online using our online ePermitting System at dnr.wi.gov/permits/water/.
- Include all required attachments. Each document must be less than 15 megabytes and our online system offers a help guide to reduce file sizes.
- Permit processing review times begin when all of the required application materials are received by the DNR. Depending on the type, complexity, and location of the proposed project, processing can take 60 working days or three months to complete a review.
- A plan approval is required for any repair or reconstruction project.
- The department may require additional information to evaluate the project.
- If you have questions regarding your application contact:
 - The local Water Management Engineer (WME) for your county, refer to dnr.wi.gov/topic/dams/regionalcontacts.html, for information about dams.
 - The local Water Management Specialist (WMS) for your county, refer to dnr.wi.gov/topic/Waterways/contacts.html for information about navigability or wetland impacts.

Please note, prior to starting any work at the project site, you are responsible for:

- Obtain all necessary local (e.g. city, town, village or county) permits
- Obtain U.S. Army Corps of Engineer permits or approvals
- Obtain any other applicable state permits

Paper copies of application materials:

After the application has been submitted electronically, please submit three (3) hard copies of all of the required attachments, except the application fee, directly to the local Water Management Engineer. When the application has been successfully submitted, the person signing the application receives a pdf copy of the WRAPP form that was filled out electronically. Please also include a note that the application was submitted electronically.

Plans and specifications are required to be prepared and stamped under the supervision of a professional engineer registered in Wisconsin. The engineer should have experience with dam design and construction. The department reserves the right to require additional information to evaluate the project.

Required attachments - Forms or documents you upload in our online ePermitting System

1. **Application form** - A complete, signed application form "Water Resources Application for Project Permits (WRAPP)" (Form 3500-053)
2. **Application fee** - Payment needs to be submitted through the ePermitting System as part of the application process. A list of fees can be found at dnr.wi.gov/topic/waterways/documents/PermitDocs/feesheet.pdf.
3. **Ownership documentation** - (i.e. copy of deed, land contract). Please provide verification of ownership and/or permanent easement for the parcel of land the dam sits on, as well as permanent access easements or construction agreements which allows for the repair or reconstruction.
4. **Photographs** that clearly show the on-the-ground conditions of the existing project area. Remember that too much snow cover or vegetation may obscure important details. If possible, have another person stand near the project area for size reference. Color images are preferred.
5. **Site maps** that clearly illustrate the location and perimeter of the project site, and its relationship to nearby water resources (e.g. lakes, rivers, streams, wetlands), major landmarks and roads. Provide copies of relevant maps (e.g. wetland, aerial, topographical, soil, floodplain, or zoning maps), with the project location clearly identified. The department offers a web mapping tool to assist in creating these maps at dnr.wi.gov/topic/surfacewater/swdv/. Include a map on a scale of not less than 4 inches to the mile; show the lands that may be affected by the repair or reconstruction of the dam. Provide copies of relevant maps (when possible) with the project area clearly identified, such as a USGS topographical map, Wisconsin Wetland Inventory map, FEMA floodplain map, NRCS soils map or a zoning map.
6. **Plans and specifications** that show what you intend to do. Plan drawings should be clear and to scale. Be sure to draw all plans as accurately and detailed as possible. Plans should be engineered to limit the potential liability of dam owners. The plans and specifications for both large and small dams must be prepared by a Professional Engineer registered in Wisconsin with experience in dam design and construction. The department reserves the right to require additional information to evaluate the project. Be sure to include:
 - Any project design report
 - Hydrologic/hydraulic analyses
 - Soil borings
 - Stability analyses
 - Any other information used in the project design
7. **Narrative description** of your proposal on a separate page. Please include:
 - What the project is, purpose of project, and need for the project.
 - Information on other participants if this is a cooperative effort.
 - How you intend to carry out the project, including methods, materials, and equipment.
 - Your proposed construction schedule and sequence of work.
 - If this information is included in the project design report with the plans and specifications, please indicate which pages the information can be found.

Note: that any temporary coffer dams must be designed to structurally withstand at least a 10-year flood event, with or without overtopping. If a preliminary design for the coffer dams is included in this submittal, the design can be approved under the Chapter 31 plan approval, and proposed design changes by the contractor would go through a change order and plan amendment. If not included, the contractor's coffer dam design would need to be submitted for a separate Chapter 30.19 permit and prepared by a Professional Engineer registered in Wisconsin.

8. Dam plan review checklist - The designer should use the dam plan review checklist, dnr.wi.gov/topic/Dams/documents/DamPlanReviewChecklist.pdf, as a guide to make sure that all of the required information is addressed in the plans and specifications. The checklist only needs to be completed for reconstruction projects which include alterations or modifications that will change the hydraulic capacity or stability of the structure.

9. Temporary drawdown checklist - If the repair or reconstruction requires a temporary lowering of the impoundment, please provide information identified in the temporary drawdown checklist, dnr.wi.gov/topic/Dams/documents/TemporaryDrawdownApplication.pdf.

10. Dam failure analysis - If required for large dams, the designer should use the dam failure analysis checklist, dnr.wi.gov/topic/Dams/documents/DFARReviewChecklist.pdf, as a guide to make sure that all of the required information is addressed. If you own a large dam, consult with your local Water Management Engineer to verify whether the analysis is needed for your project.

11. Erosion control standards - Temporary and permanent erosion control measures must exceed the stormwater management technical standards.

12. Wild rice - If any existing wild rice is known to be included within the Ceded Territory, provide a brief narrative indicating potential impacts.

13. Wetland permit application - If wetlands are present where any work will be done, you will also need to apply for a wetland permit. Refer to the decision module to determine which application to submit, dnr.wi.gov/topic/Waterways/construction/wetlands.html.

14. Endangered and threatened resources - The applicant is not required, but is encouraged to request an endangered resources (ER) review letter before applying for the permit. Information on how to obtain a review can be found by visiting the website at dnr.wi.gov/topic/ERReview/Review.html. The applicant can also visit the NHI Public Portal, dnr.wi.gov/topic/ERReview/PublicPortal.html, to determine if a full ER Review is required. Read the 'What is an ER Preliminary Assessment and what do the results mean?' section to determine follow-up steps.

15. Historical and cultural resources - If you are aware there is a historical or cultural resource present, you are **required** to contact the Wisconsin State Historical Society to verify and receive documentation that the activity will not result in an adverse impact to these resources.